

FIG.1

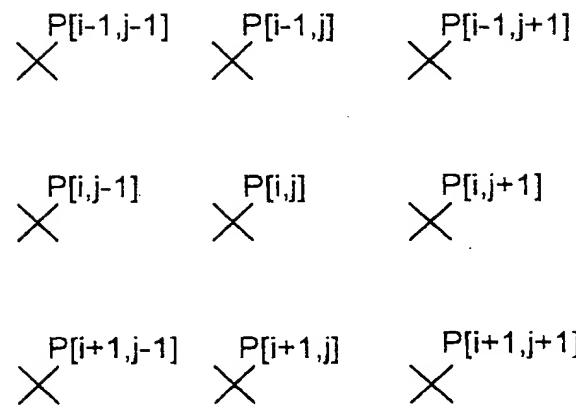


FIG.2

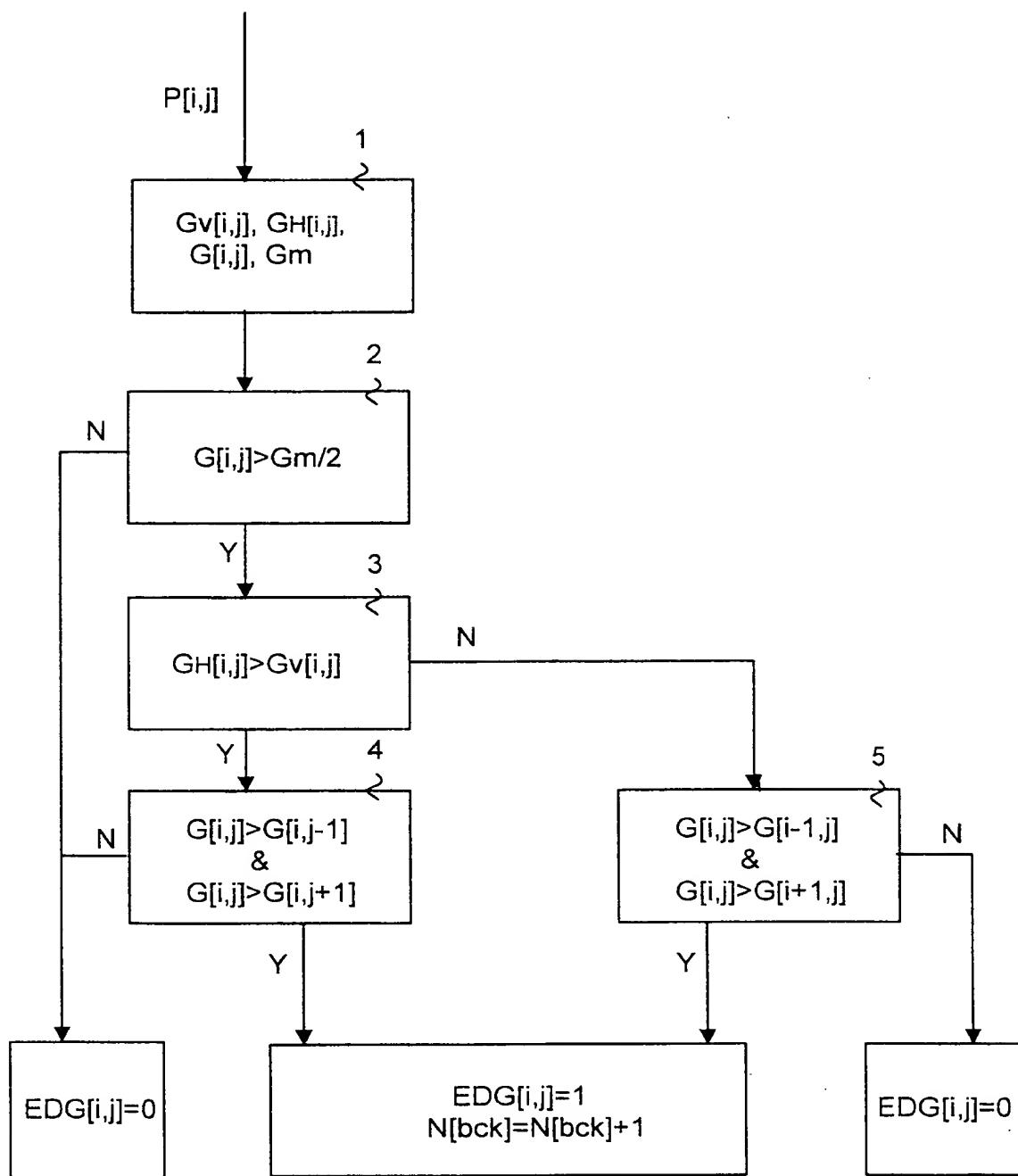


FIG.3

$$S_H = \begin{pmatrix} -1 & -2 & -1 \\ 0 & 0 & 0 \\ 1 & 2 & 1 \end{pmatrix} \quad S_V = \begin{pmatrix} -1 & 0 & -1 \\ -2 & 0 & 2 \\ -1 & 0 & 1 \end{pmatrix}$$

$$Y = \begin{pmatrix} P[i-1,j-1] & P[i-1,j] & P[i-1,j+1] \\ P[i,j-1] & P[i,j] & P[i,j+1] \\ P[i+1,j-1] & P[i+1,j] & P[i+1,j+1] \end{pmatrix}$$

FIG.4

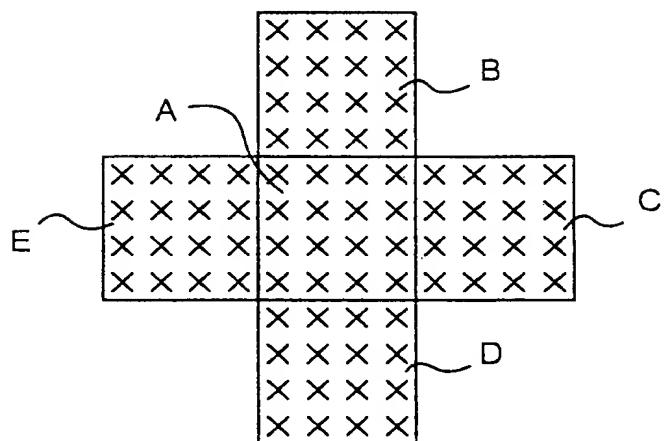


FIG.5

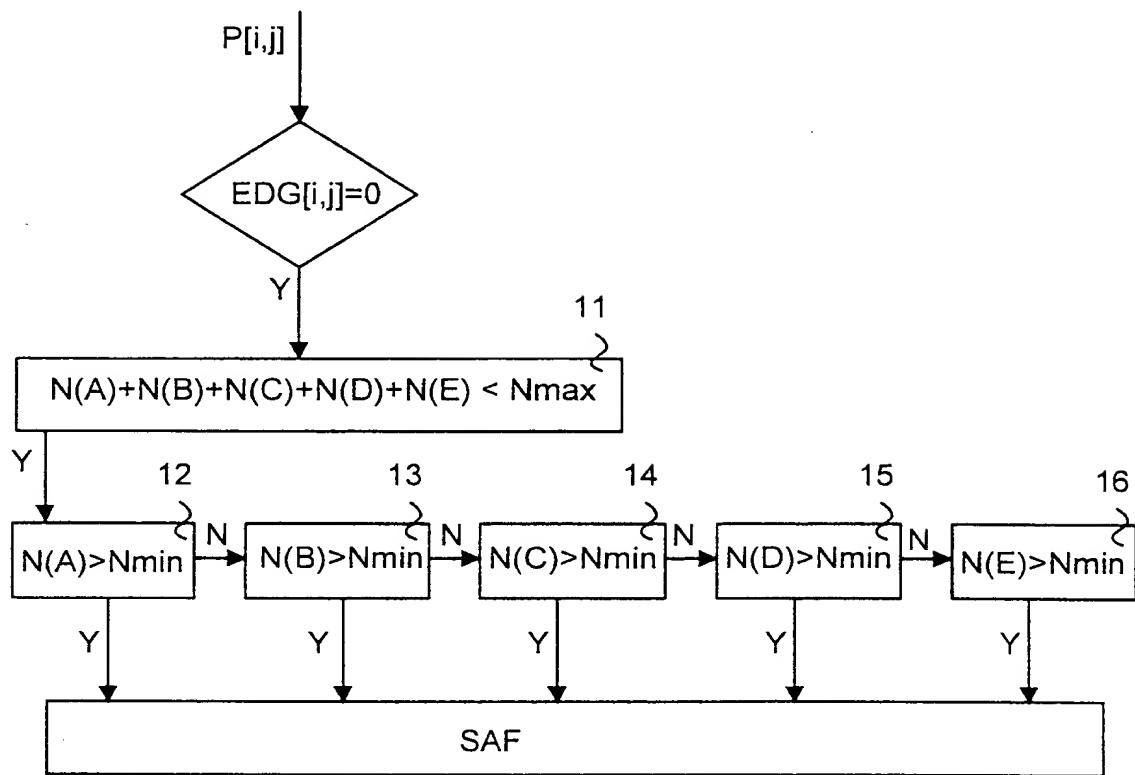


FIG.6